Scenario for an Environmental Water Account
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The primary purpose of an "Environmental Water Account" is to establish criteria for real-time curtailment of Delta exports to reduce the associated mortality of resident and anadromous species. This end can be accomplished in several ways, and need not include physical storage of water, but merely a system of rules, which integrates fishery agencies' ability to curtail exports with other more traditional "prescriptive" standards.

There are several obvious advantages of not using physical storage to hold the assets of an EWA. In general, "environmental" storage is needed only if the protections afforded by operational rules are not sufficient, which they have not been. Significant fishery impacts have occurred as a result of overbuilding dams canals and other facilities. Any additional facilities ought to at least pass an economic test that demonstrates a willingness to pay for additional supplies. This will occur only if water user dollars pay for any new facilities. If new facilities are subsidized with public money, incentives for conservation will be undermined. In addition, the complexity of managing aqueduct conveyance would be increased if physical storage were used to hold EWA water. The responsibility of managing both storage and conveyance is far from the purview of the fishery agencies. Since supplies from south-of-Delta storage would eventually be delivered to water users anyway, it is more efficient for water users to manage that storage.

The specifications below are intended to represent a viable scenario, though no single piece is sacred (except the need for real-time export curtailments that are not tied to "environmental" storage). It does seem reasonable, however, that CALFED evaluate a method of implementing real-time curtailment that does not require physical storage. This scenario is intended to decrease the mortality associated with export operations, but is not intended to address "baseline" issues associated with the overall volume of exports.

Prescriptive Standards

All terms and conditions currently in place, including those specified by the 1995 WQCP, Order 98-9 and the AFRP criteria as set forth by Interiors 1997 administrative decision, except:

- Elimination of the E/I ratio
- Elimination of all joint point of diversion restrictions
- Increase of SWP export capacity to 8500 cfs.

The Environmental Water Account

In addition to the prescriptive standards described above, fishery managers have the discretion to authorize real-time export reductions. It may be appropriate to define this description in any number of ways. For the sake of simplicity, I suggest beginning with 500 TAF in each water year (October-September). Each October 1, the EWA would be set to 500 TAF, erasing any previous balance. The account would be decremented whenever the fishery manager implements real-time export reductions. For modeling purposes, during the periods of real-time curtailment, reservoir releases continue as if the exports were taking place.

In order to avoid a situation in which the EWA assets are used for little fishery benefit late in the water year, I suggest that the account linearly decline, beginning June 1, so that its value on October 1 would be zero, or a low number. In this way, the fishery manager does not have the incentive to curtail exports without reason, as EWA assets are shrinking throughout the summer and may be needed.

Other non-storage EWA assets could include water or water option purchases south-of-Delta, efficiency purchases.

Water User Assets

These assets would include, in addition to existing facilities, the incremental yield resulting from the relaxation of the prescriptive standards above. The water supply benefits of other facilities, including the surface and groundwater storage opportunities, identified by Dave Fullerton and earlier by the No-Name Group, can be evaluated with water supply models.